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Permit No.: ST-9087

Issuance Date: January 9, 2004 Effective Date: March 1, 2004 Expiration Date: February 28, 2009

## STATE WASTE DISCHARGE PERMIT NUMBER ST-9087

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY CENTRAL REGIONAL OFFICE YAKIMA, WASHINGTON

In compliance with the provisions of the State of Washington Water Pollution Control Law Chapter 90.48 Revised Code of Washington, as amended, authorizes

# TESSENDERLO KERLEY, INC. 46807 S PIERT RD KENNEWICK, WA 99337-7746

to discharge wastewater in accordance with the special and general conditions which follow.

<u>Facility Location</u>: <u>Discharge Location</u>:

46807 S. Piert Road Legal Description: SW ¼ of Section 25, Kennewick, WA 99337 Township 8 North, Range 30 E. W. M.

<u>Industry Type</u>
Production of Pesticides and Fertilizers

Latitude: 46° 8' 23" N
Longitude: 119° 00' 31" W

SIC Code:

2873-Nitrogenous Fertilizers 2879-Agricultural Chemicals

G. Thomas Tebb, L.E.G.
Section Manager
Water Quality Program

Central Region Office

Washington State Department of Ecology

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# SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	April 15, 2004
S2.C.	Soil Monitoring Report	Annually	March 1, 2005
S5.	Updated Spill Control Plan	1/permit cycle	March 1, 2006
G7.	Application for Permit Renewal	1/permit cycle	February 28, 2008 <sup>a</sup>

<sup>&</sup>lt;sup>a</sup> At least one (1) year prior to permit expiration date

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## **SPECIAL CONDITIONS**

## S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

# A. Interim Discharge Limitations

Beginning on March 1, 2004 and lasting through February 28, 2007 (2 years prior to the expiration date of this permit), the Permittee is authorized to apply wastewater to land via spray irrigation on the following designated irrigation lands:

SW1/4 of Section 25, Township 8 North, Range 30 E.W.M.

Discharges shall be subject to the following limitations:

	INTERIM EFFLUENT LIMITATIONS
Parameter	
pН	Between 6.5 and 9.0 S. U. at all times

## **B.** Final Discharge Limitations

Final discharge limitations are to be determined after submittal and analyses of cooling wastewater discharge data (S2.A), ground water monitoring data (S2.B), and soil monitoring data (S2.C). The final permit limitations shall be set in a permit modification **February 28, 2007** (two years prior to permit expiration).

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# **S2.** MONITORING REQUIREMENTS

# A. Wastewater Monitoring -- Cooling Water Blowdown

The sampling point for the effluent from the above ground treatment works shall be at the blowdown valve prior to discharging to the sprayfields. The Permittee shall monitor process wastewater discharges from the cooling water blowdown discharge according to the following schedule:

Parameter	Units	Sample Point	Sampling Frequency <sup>a</sup>	Sample Type
Monthly Flow b	Gallons	Flow Meter	Monthly	Flow meter
Average Daily Flow	Gallons	Not Applicable	Not Applicable <sup>c</sup>	Calculation
рН	Standard Units	Blowdown valve	Twice monthly	Grab
TDS	mg/l	Blowdown valve	Quarterly	Grab
Total Coliform	Colonies /100 ml	Blowdown valve	Quarterly	Grab
Sodium	mg/l	Blowdown valve	Quarterly	Grab
Sulfate	mg/l	Blowdown valve	Quarterly	Grab
Calcium	mg/l	Blowdown valve	Quarterly	Grab
Potassium	mg/l	Blowdown valve	Quarterly	Grab
Magnesium	mg/l	Blowdown valve	Quarterly	Grab
Chloride	mg/l	Blowdown valve	Quarterly	Grab
NO <sub>3</sub> (as N)	mg/l	Blowdown valve	Quarterly	Grab
Total-P (as P)	mg/l	Blowdown valve	Quarterly	Grab
TKN (as N)	mg/l	Blowdown valve	Quarterly	Grab
Iron	mg/l	Blowdown valve	Quarterly	Grab
NH <sub>3</sub> (as N)	mg/l	Blowdown valve	Quarterly	Grab

<sup>&</sup>lt;sup>a</sup> The Department will consider reducing sampling frequency after 4 quarters of data is received upon submittal of a written request.

b Report total monthly flow.

<sup>&</sup>lt;sup>c</sup> Calculate average flow per daily discharge by dividing total monthly flow by number of days discharged for given month.

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# B. Ground Water Monitoring – Process Production Well

The sampling point for ground water will be the Permittee's process production well, which was drilled in 1989. This well is located a short distance east of the facility's maintenance building. The location coordinates of this well are:

Latitude: 46° 08' 24.9" N

Longitude: 119° 00' 30.6" W (NAD83).

The Permittee shall monitor the ground water according to the following schedule:

Parameter	Units	Sampling Frequency <sup>a</sup>	Sample Type
Ferrous Iron	Present /Absent	Quarterly	Field
			Measurement
Iron (Total)	mg/l	Quarterly	Grab
Total Organic Carbon	mg/l	Quarterly	11
pН	Standard Units	Quarterly	"
Conductivity	Micromho/cm	Quarterly	"
Total Coliform	CPU/100 ml	Quarterly	"
Water Level	Feet	Quarterly	Measurement
Temperature	°C	Quarterly	"
Bicarbonate alkalinity	mg/l	Quarterly	Grab
Carbonate alkalinity	mg/l	Quarterly	"
Chloride	mg/l	Quarterly	"
Fluoride	mg/l	Quarterly	"
Sulfate	mg/l	Quarterly	"
Total Dissolved Solids	mg/l	Quarterly	"
NO <sub>3</sub> (as N)	mg/l	Quarterly	"
TKN (as N)	mg/l	Quarterly	"
Calcium	mg/l	Quarterly	"
Magnesium	mg/l	Quarterly	"
Potassium	mg/l	Quarterly	"
Sodium	mg/l	Quarterly	"
Manganese	mg/l	Quarterly	"

<sup>&</sup>lt;sup>a</sup> The Department will consider reducing sampling frequency after 4 quarters of data is received upon submittal of a written request.

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# C. Annual Soil Monitoring

The Permittee shall perform annual soil monitoring where wastewater is applied. These sampling sites shall be located so as to be representative of each irrigation site. If possible, sampling sites shall remain in the same vicinity from year to year. Testing at each sampling site shall be done on one foot soil increments. Results of monitoring to date shall be submitted annually as the Soil Monitoring Report.

Composite samples will be for six depths [0-12"; 12-24"; 24-36"; 36-48"; 48-60"; 60-72"(or until auger refusal)] and will be from a minimum of four (4) cores. Samples will be collected at a time that best represents soil conditions at the end of the crop growing season.

The Permittee shall monitor the soils in the sprinkler area according to the following schedule:

Parameter	Units	Sample Point	Depth Increments <sup>1</sup>
Exchangeable sodium	%	Soil Under Cooling	
percentage		Water Blowdown	
		Application Area	
Cation exchange capacity	meq/100g	"	1, 4
Organic matter	%	"	1,2,6
Moisture content	%	"	1
TKN (as N)	mg/Kg	"	1,2
NO <sub>3</sub> (as N)	mg/Kg	"	1-6
NH <sub>3</sub> (as N)	mg/Kg	"	1,2,4,6
Total-P (as P)	mg/Kg	"	1, 4
Conductivity	mmhos/cm	"	1-6
Sodium	meq/100g	"	1, 4
Calcium	meq/100g	"	1, 4
Magnesium	meq/100g	"	1, 4
Potassium	mg/Kg	"	1, 4
Sulfate (as S)	mg/Kg	"	1, 4
pН	s.u.	"	1, 4

<sup>1</sup> Depth (inches) vs. Depth increment (ft.) for composite samples: 0 -12" (1); 12-24" (2); 24-36" (3); 36-48" (4); 48-60" (5); 60-72" (6)

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# D. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

All soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981.

#### E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

# F. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, turbidity, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Crops, soils, and hazardous waste testing has not been included in the accreditation program. Crops, soils, and

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hazardous waste data shall be provided by a lab accredited for similar parameters in water media.

# G. Request for Reduction of Monitoring

The Permittee may request a reduction of the sampling frequency after twelve (12) months of monitoring. The request shall: (1) be in written form, (2) clearly state the parameters for which the reduction in monitoring is being requested, and (3) clearly state the justification for the reduction. Any request for reduction in monitoring shall be granted at the Department of Ecology's (Department) discretion and accomplished through an Administrative Order or permit modification.

# S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

## A. Reporting

The first monitoring period begins on **March 1, 2004**. Monitoring results shall be submitted quarterly. Monitoring data obtained during the previous three months shall be summarized and reported on forms provided, or otherwise approved, by the Department, and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. The report(s) shall be sent to:

Permit Data Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Discharge Monitoring Report forms must be submitted quarterly whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

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### **B.** Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

# C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

# D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

# **E.** Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- 2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
- 3. Immediately notify the Department of the failure to comply; and
- 4. Submit a detailed written report to the Department within thirty days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

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Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

# F. Maintaining a Copy of This Permit

A copy of this permit shall be kept at the facility and be made available upon request to Ecology inspectors.

## S4. OPERATION AND MAINTENANCE

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit. If at a future date, the Permittee's cooling blow-down effluent discharge exhibits significant increases in volume to the sprayfield, the Department may require the submittal of an Operation and Maintenance manual.

## S5. SPILL CONTROL PLAN

The Permittee shall by **March 1, 2006**, submit to the Department an updated Spill Control Plan. The updated Spill Control Plan shall address all potential sources of spilled material in the Permittee's production and storage areas.

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#### **GENERAL CONDITIONS**

# G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### **G2. RIGHT OF ENTRY**

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or

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discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

# **G3. PERMIT ACTIONS**

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

# **G4.** REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

#### G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

# **G6.** COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

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### G7. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least one (1) year prior to the specified expiration date of this permit.

## **G8.** PERMIT TRANSFER

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Department;
- B. A copy of the permit is provided to the new owner and;
- C. The Department does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by the Department.

#### **G9.** PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

## G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.